

VC-6 Det Patuxent River, MD



Overview

Outline

¥VC-6

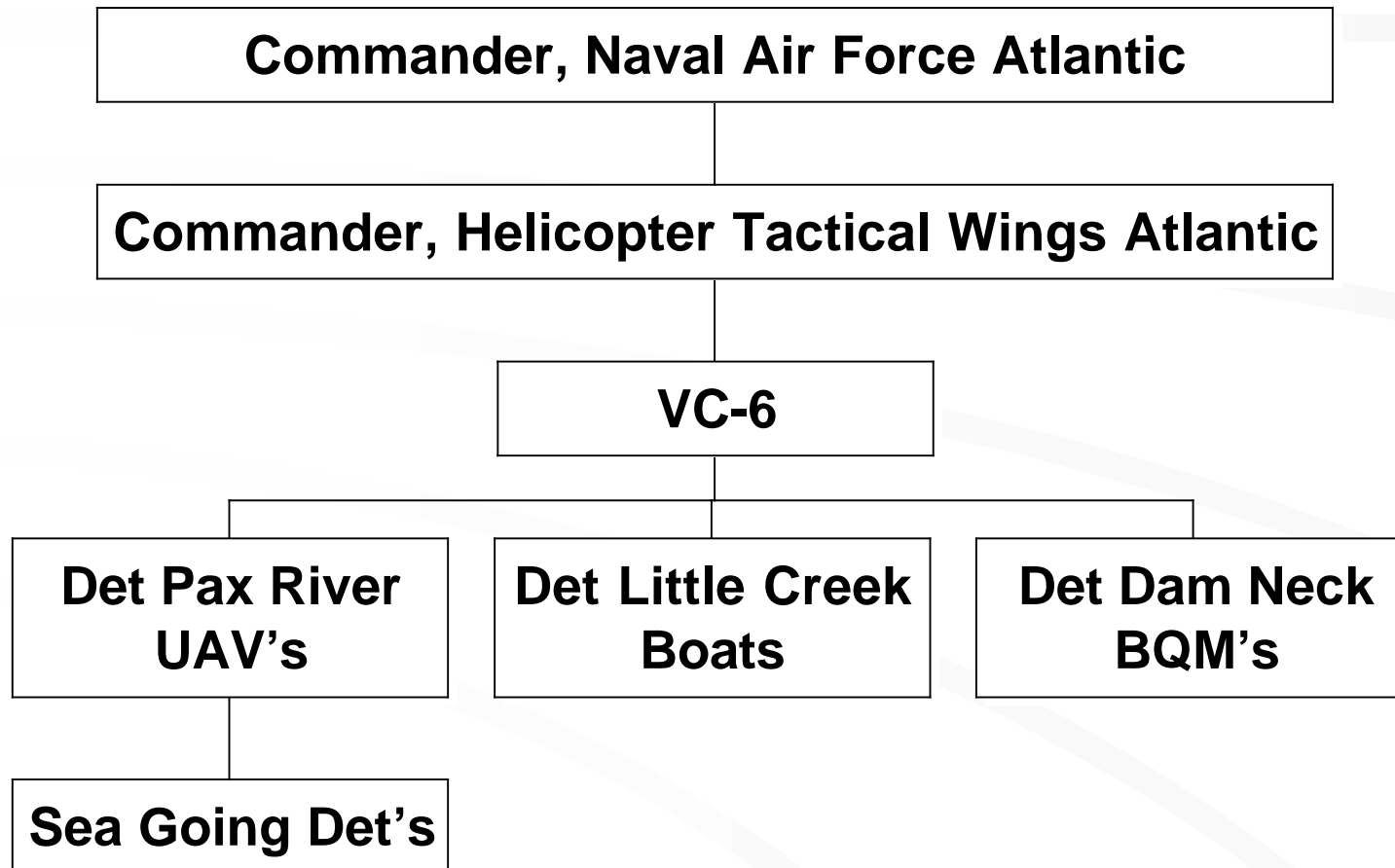
¥Shipboard Ops

¥CONUS Ops

¥Pioneer UAV System

¥The Way Ahead

Task Organization





Targets



¥ Aerial Target - BQM-74

¥ Surface Targets

—QST-35

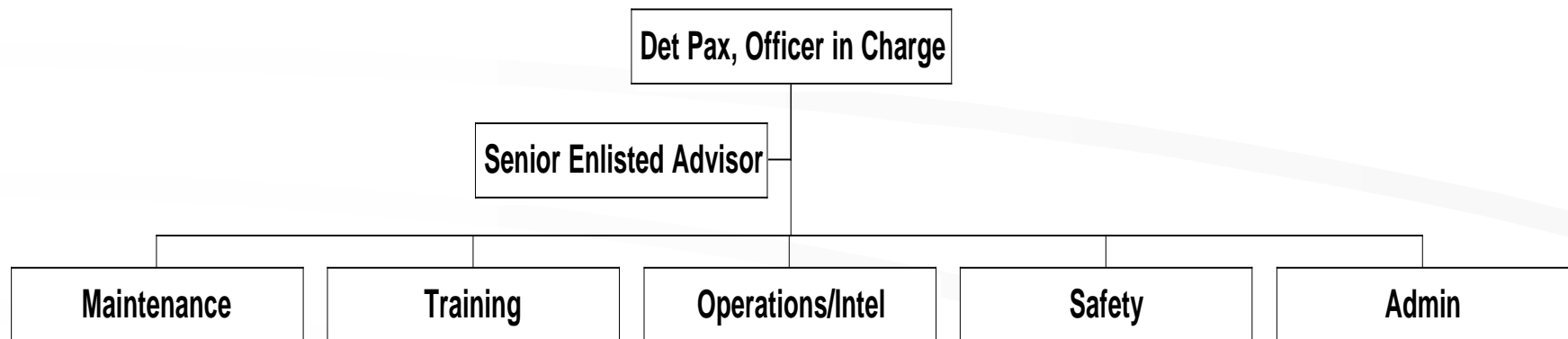
—ROBO SKI

—HSMST

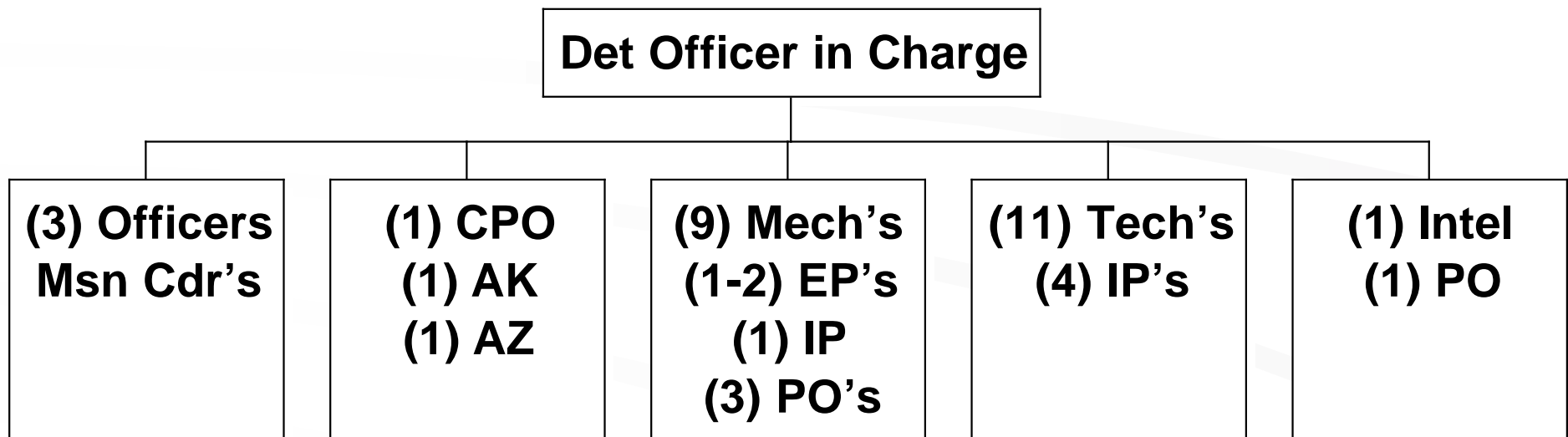
—7M RHIB



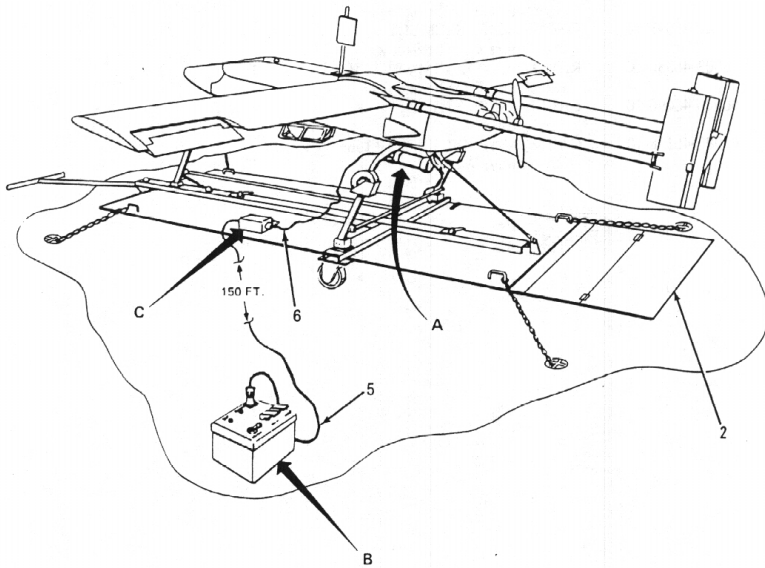
Det Pax River Organization



Sea-Going Det Organization



Shipboard Ops - Launch



Shipboard Ops - Recovery (SPARS)

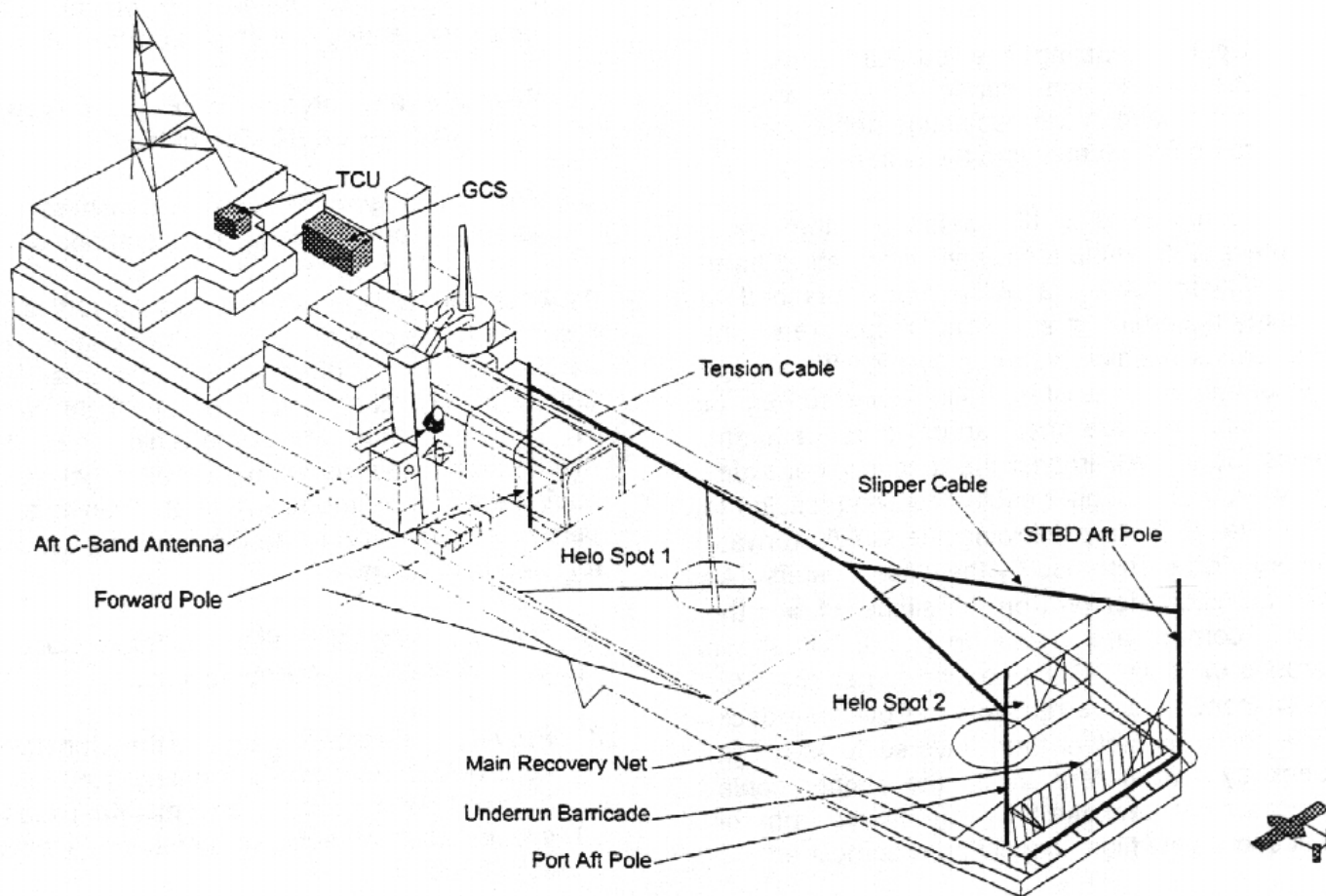
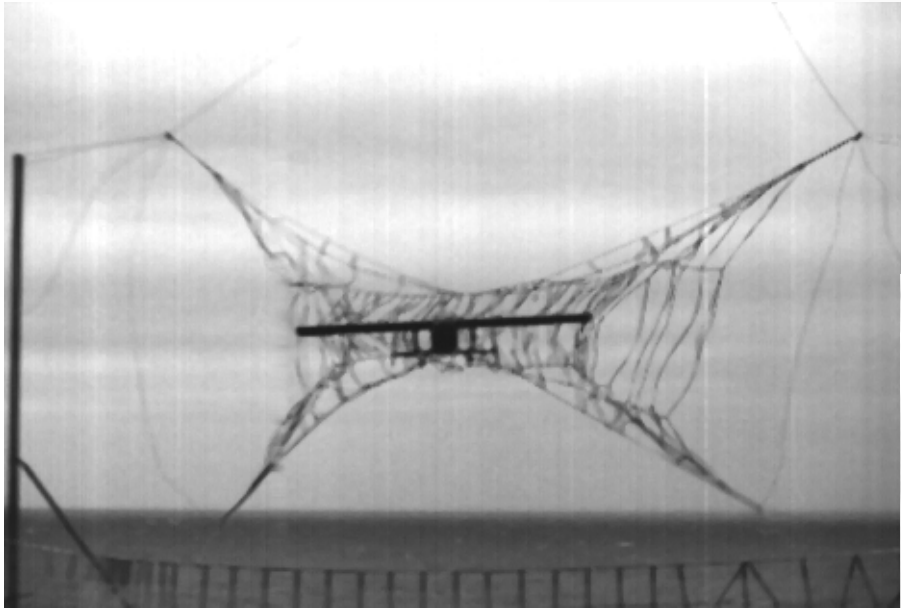


Figure 11-2. Shipboard Pioneer Arrestment and Recovery System (SPARS) III Installation

Shipboard Ops - Recovery



CONUS Detachments

- ¥ Joint Task Force Six (JTF-6) Operation
- ¥ Carrier Air Wing Training (CVW) Fallon, Nevada
- ¥ Joint Task Force Exercises

Local Operating Area

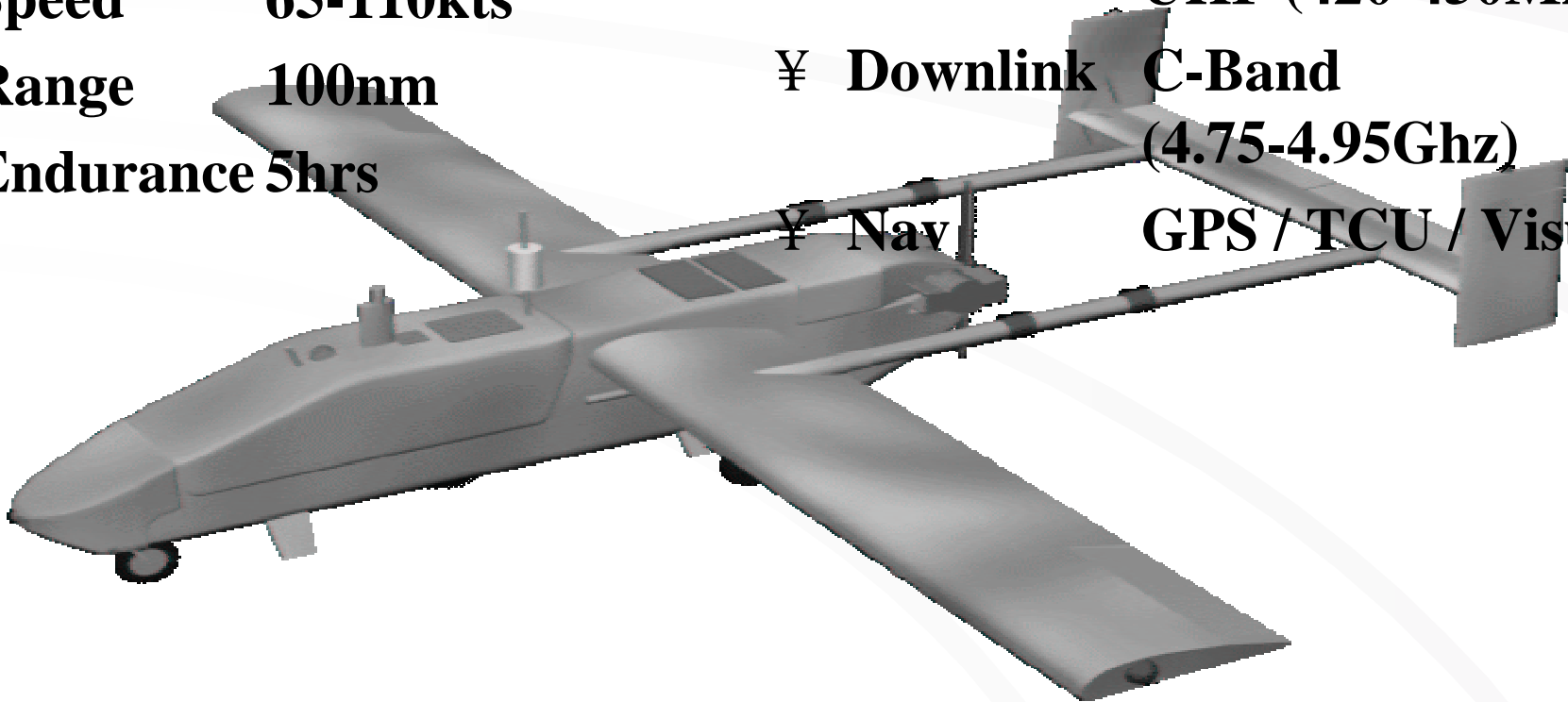


Webster Field



UAV System: Aircraft

¥ Size	16.9'x 14'0"	¥ Fuel	110 oct AVGAS
¥ Wt	460lb	¥ IFF	Mode 3C
¥ T/O / Ldg	800-1200ft	¥ Lights	Strobe/Position
¥ Altitude	SFC-12K	¥ Uplinks	C-Band (4.55Ghz) UHF (420-450Mhz)
¥ Speed	65-110kts	¥ Downlink	C-Band (4.75-4.95Ghz)
¥ Range	100nm	¥ Nav	GPS / TCU / Visual
¥ Endurance	5hrs		



PIONEER Air Vehicle Limitations

Winds

T/Off & Land **25kts headwind / 15kt crosswind**

Aloft **Winds in excess of 60kts**

Downdrafts

Weather

No Visible Moisture

No Icing Conditions



UAV System: Ground Control Station (GCS)



PDMS: Pioneer Digital Map System

UAV System: Tracker Control Unit (TCU)

¥ LOS

¥ Directional / Omni

¥ Rng/Bng/Alt

¥ Uplink

—Command / Control

¥ Downlink

—Report

—Video

—Health/Status

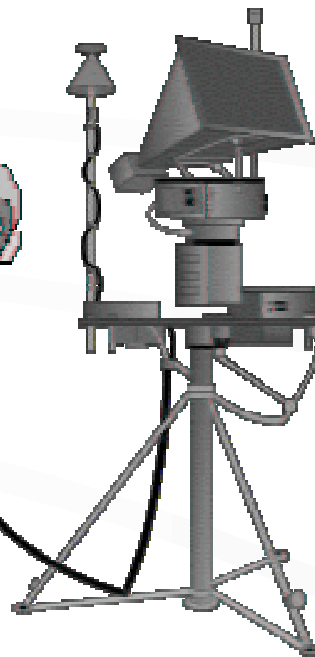


UAV System: Portable Control Station (PCS)

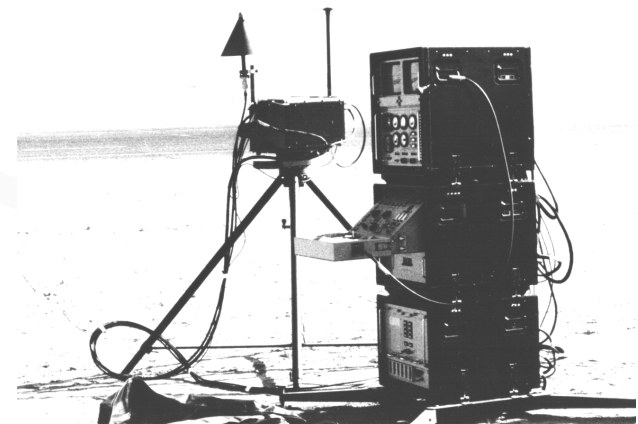
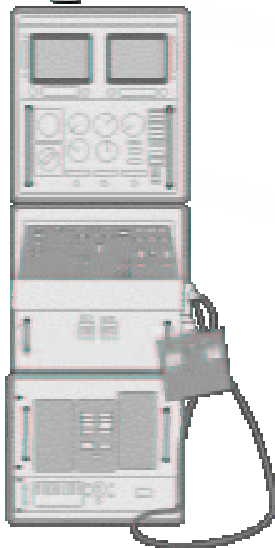
TRUCK MOUNTED
S-250 SHELTER



PCS ANTENNA
TRIPOD ASSEMBLY

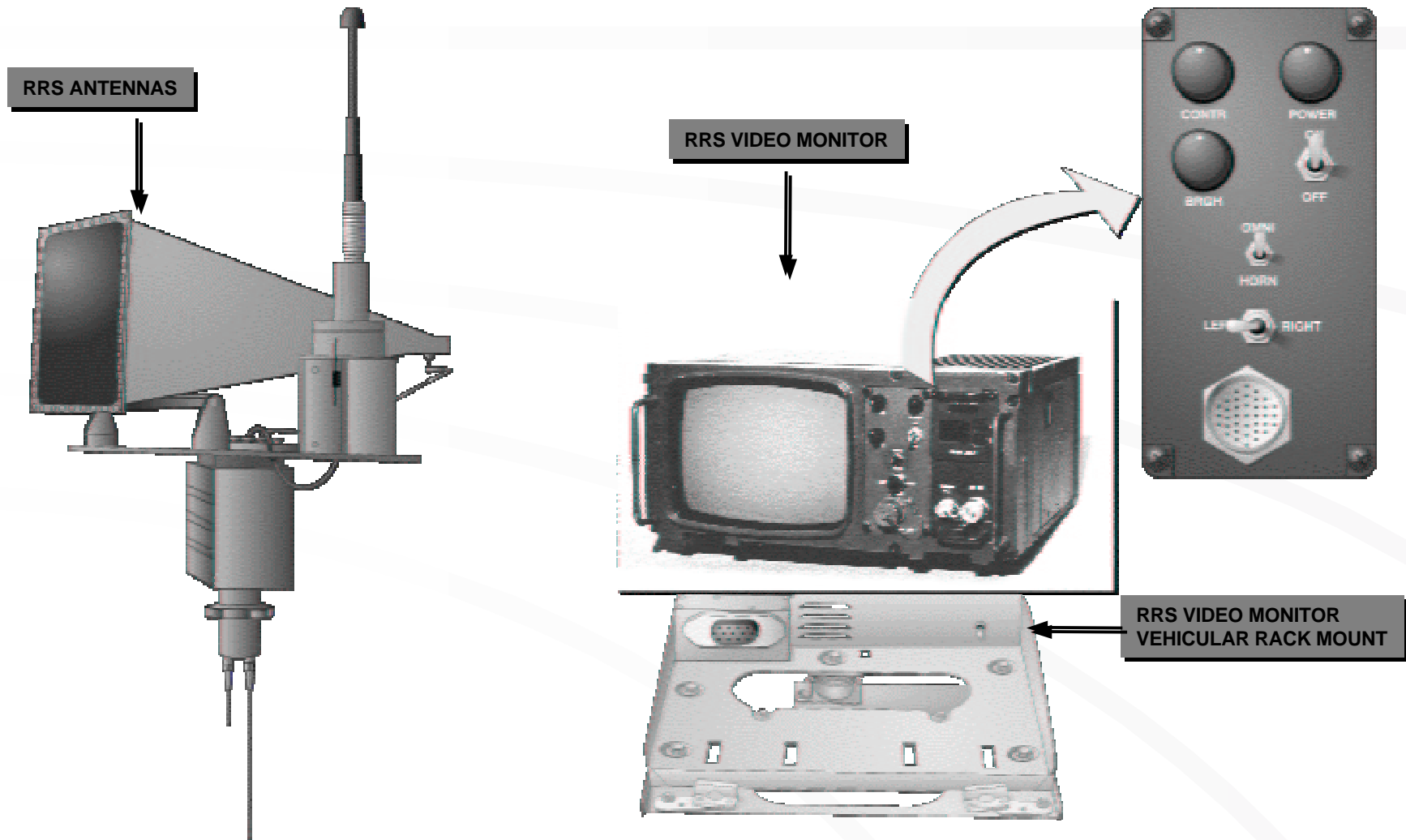


PCS CONSOLE
(LOCATED IN
S-250 SHELTER)

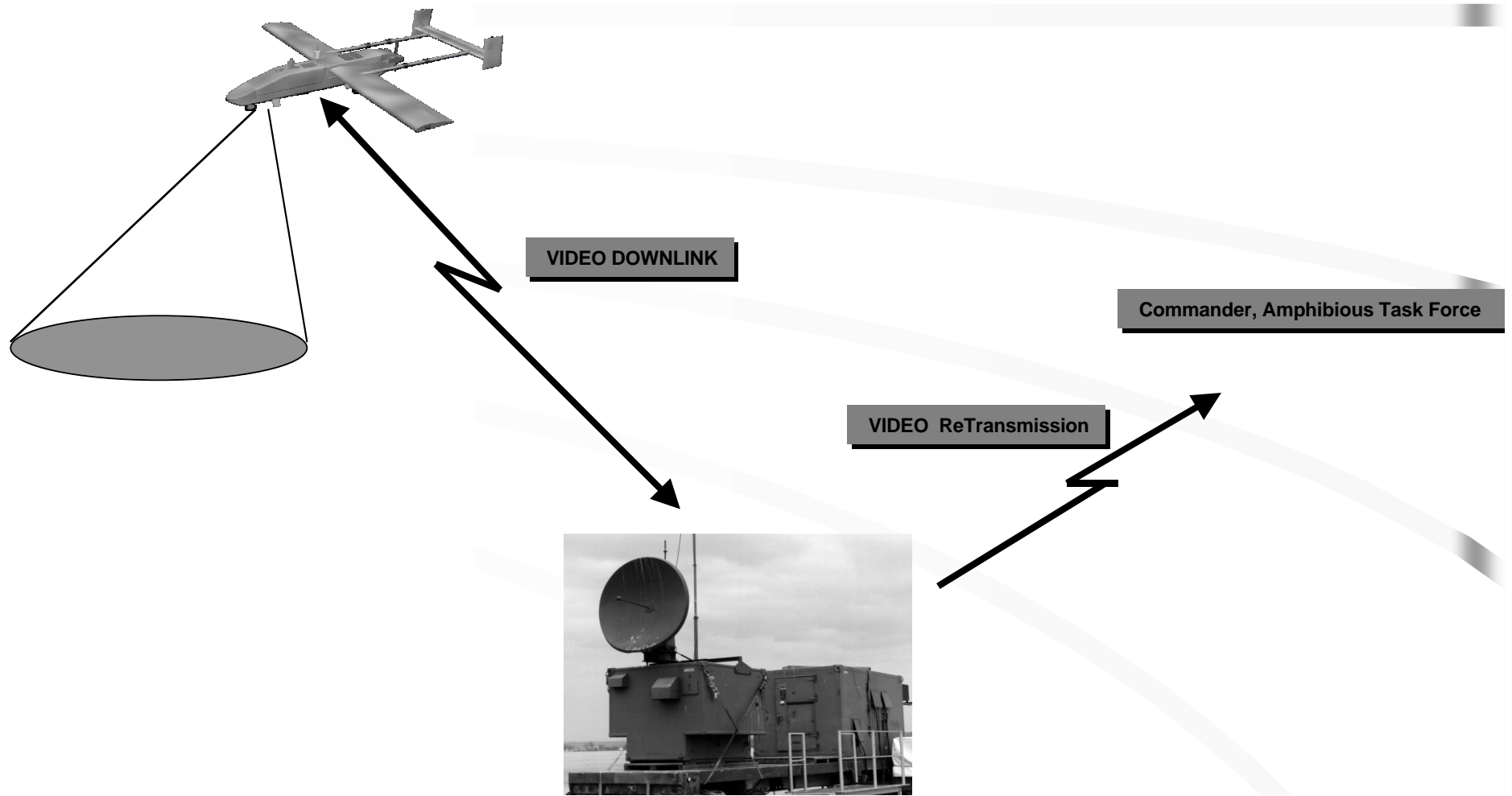


UAV System:

Remote Receiving Station (RRS)



UAV System: Video ReTransmission System (VRS)



UAV System: DS-12 Camera

- Daylight TV and Forward Looking Infrared
- Line of Sight Coverage
 - 360 degree multi-turn continuous
- Field of View
 - Super-Wide
 - Wide
 - Narrow



DS-12 Video Imagery



The Way Ahead

- ¥ Continued JTF-6 Operations and CVW Training, JTFEX
- ¥ VTUAV CONOPS Development
- ¥ Contingency Operations
- ¥ Shipboard Refresher Training
- ¥ Manpower Plus-up